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EXAMINER	
TRAN, THAI Q	

ART UNIT	PAPER NUMBER
2616	

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/668,228	KATO, MOTOKI	
	Examiner	Art Unit	
	Thai Tran	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-43 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-43 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 19 December 2000 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 9/5/03 &3/24/04.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 22-26 and 38 are rejected under 35 U.S.C. 101 because claims 22-26 and 38 are directed to non-functional descriptive material recorded on the recording medium. Data structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are neither physical "things" nor statutory processes. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory) and merely claiming nonfunctional descriptive material stored in a computer-readable medium does not make it statutory. See MPEP 2106 IV B 1.

Claim Objections

4. Claim 40 is objected to because of the following informalities: --and—should be inserted after "data recording medium" in line 4. Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 2, 7, 14, 21, and 42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 recites the limitation "said counting means" in line 6. There is insufficient antecedent basis for this limitation in the claim.

Claim 7 recites the limitation "said map generator" in line 2, "said I picture" in lines 2-3, and "said entry point map" in line 3. There are insufficient antecedent basis for these limitations in the claim.

Claim 14 recites the limitation "said entry point map" in lines 3-4. There is insufficient antecedent basis for this limitation in the claim.

Claim 21 recites the limitation "said entry point map" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 42 recites the limitation "said calculation means" in 12. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 39 and 41-42 are rejected under 35 U.S.C. 102(b) as being anticipated by Kawara (US 5,838,872).

Regarding claim 39, Kawara discloses a transport stream reproduction device (Fig. 10) for reproducing the transport stream recorded in aligned units on the recording medium, comprising:

specifying means (high speed reproduction disclosed in col. 14, lines 14-25) for specifying the reproduction start position, a calculating means (high speed reproduction disclosed in col. 14, lines 14-25 and lines 35-61) for calculating the address of said data recording medium corresponding to the designated reproduction start position; and read-out means (high speed reproduction disclosed in col. 14, lines 35-61) for starting readout of said transport packet from address on said data recording medium calculated by said calculating means.

Regarding claim 41, Kawara discloses the claimed conversion means (skipping data in high-speed reproduction disclosed in col. 5, lines 41-57) for converting a specified erase range into data area for said aligned units; and deletion means (skipping data in high-speed reproduction disclosed in col. 5, lines 41-57) for deleting said transport stream recorded in said data area for said aligned units converted by said conversion means.

Method claim 42 is rejected for the same reasons as discussed in corresponding apparatus claim 39.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawara (US 5,838,872).

Regarding claim 43, Kawara discloses all the claimed limitations as discussed in claim 39 except for providing a program recording medium.

Kawara also teaches, in other embodiment, that the microprocessor and associated programs stored can be used to control the DVD player (col. 17, lines 34-36).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the microprocessor and associated programs as taught in one embodiment of Kawara into other embodiment of Kawara in order to simplify the process of controlling the DVD player of Kawara.

11. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawara (US 5,838,872) in view of Tanaka et al (US 2004/0047610).

Kawara discloses all the claimed limitations as discussed in claim 39 above and including claimed acquisition means for acquiring an entry point map from said recording medium (high speed reproduction disclosed in col. 14, lines 35-61), searching means for comparing the specified reproduction start position with the entry point map and searching for the entry point adjacent to said specified reproduction start position

(high speed reproduction disclosed in col. 14, lines 35-61); and wherein said calculation means calculates the address of said recording medium recorded in said transport packet corresponding to said entry point, using the count contained in said entry point map (high speed reproduction disclosed in col. 14, lines 35-61). However, Kawara et al does not specifically discloses that the entry point map contains PTS.

Tanaka et al also teaches DVD player having the capability of reading PTS (page 16, paragraph #0209).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the PTS disclosed in the Tanaka et al into Kawara's system in order to increase the quality of the reproduced data because PTS is used for synchronizing purpose.

12. Claims 1-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka et al (US 2004/0047610) in view of Kawara (US 5,838,872).

Regarding claim 1, Tanaka et al discloses a transport stream recording device (Fig. 36) for recording input transport streams on a data recording medium, comprising:

a header attachment section (page 8, paragraph #0124)of attaching a header to a transport packet having said transport stream and generating a source packet. However, Tanaka et al does not specifically disclose a record section of recording a predetermined specified number of said source packets on said data recording medium as aligned units.

Kawara teaches an image information recording apparatus having a record section of recording a predetermined specified number of said source packets on said

data recording medium as aligned units (col. 8, lines 40-54) so that the GOPs are aligned with the sectors of the disk.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the capability of aligning of the GOPs with the sectors of the disk by adding stuffing bytes as taught by Kawara into Tanaka et al's system in order to facilitate the capability of high-speed reproducing of the DVD player.

Regarding claim 2, Kawara also discloses a counter (a counter disclosed in col. 10, lines 22-38) for counting the number of transport packets having said transport stream; and

null packet generator (stuffing bytes S disclosed in col. 8, lines 40-54) for generating null packets according to the count from said counting means.

Regarding claim 3, Kawara discloses the claimed wherein the beginning of each said aligned unit is periodically placed in the beginning of a sector (the alignment of the GOP with sectors of the disk disclosed in col. 8, lines 40-54).

Regarding claim 4, Kawara discloses the claimed wherein said data length of said aligned units is equivalent of a multiple of the sector length of said data recording medium (the alignment of the GOP with sectors of the disk disclosed in col. 8, lines 40-54).

Regarding claim 5, Kawara discloses the claimed wherein said sector length is equivalent to a multiple of the data length of said aligned unit (the alignment of the GOP with sectors of the disk disclosed in col. 8, lines 40-54).

Regarding claim 6, Kawara discloses a detector (a jump address JA1 disclosed in col. 13, lines 37-45) for detecting transport packets containing entry points from among said transport packets; and

a map generator (a jump address JA1 disclosed in col. 13, lines 37-45 and col. 14, lines 26-34) for generating an entry point map listing with transport packet positions containing said entry points.

Regarding claim 7, Kawara discloses the claimed wherein said map generator lists the addresses of the I picture in said entry point map (a jump address JA1 disclosed in col. 13, lines 37-45 and col. 14, lines 26-34) and Tanaka et al also discloses the claimed PTS (page 16, paragraph #0209). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the PTS disclosed in the Tanaka et al in order to increase the quality of the reproduced data because PTS is used for synchronizing purpose.

Method claims 8-14 are rejected for the same reasons as discussed in the corresponding apparatus claims 1-7 above.

Program recording medium claims 15-21 are rejected for the same reasons as discussed in the corresponding apparatus claims 1-7 above and the a microprocessor and the associated programs stored disclosed in col. 17, lines 34-36 of Kawara.

Data recording medium claims 22-26 are rejected for the same reasons as discussed in the corresponding apparatus claims 1-5 above and the recording medium disclosed in col. 7, lines 51-63 of Kawara.

Regarding claim 27, Kawara further discloses the claimed a reproduction section (reproduction disclosed in col. 13, lines 46-64); a calculating section (high speed reproduction disclosed in col. 14, lines 14-25) for calculating the address corresponding to the designated reproduction start position; and a controller (high speed reproduction disclosed in col. 14, lines 35-61) for controlling said reproduction section so that read-out of said transport packets starts from the calculated address.

Regarding claim 28, Kawara also discloses the claimed wherein said controller further controls the reproduction section to acquire an entry point map from said recording medium (high speed reproduction disclosed in col. 14, lines 35-61), compares the entry point map with the designated reproduction start position (high speed reproduction disclosed in col. 14, lines 35-61), and searches the entry points adjacent to said specified reproduction start position (high speed reproduction disclosed in col. 14, lines 35-61); and said calculation section calculates the address corresponding to said entry points recorded in said transport packet (high speed reproduction disclosed in col. 14, lines 35-61) and Tanaka et al also discloses the claimed PTS (page 16, paragraph #0209). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the PTS disclosed in the Tanaka et al in order to increase the quality of the reproduced data because PTS is used for synchronizing purpose.

Regarding claim 29, Kawara discloses the claimed a deletion section to convert a designated deletion range into said aligned unit data region and to delete said converted aligned units recorded on said transport streams (skipping data in high-speed reproduction disclosed in col. 5, lines 41-57).

Method claims 30-31 are rejected for the same reasons as discussed in apparatus claims 27-29 above.

Claim 32 is rejected for the same reasons as discussed in claim 1 above and Kawara further discloses the claimed classifying means (generating GOP disclosed in co. 6, lines 27-55) and wherein the data quantity of the aligned unit is equivalent to a multiple of the data quantity recordable on one sector of said data recording medium (the alignment of the GOP with sectors of the disk disclosed in col. 8, lines 40-54).

Regarding claim 33, Kawara also discloses counting means (a counter disclosed in col. 10, lines 22-38) for counting the number of transport packets having said transport stream; and

null packet generator means (stuffing bytes S disclosed in col. 8, lines 40-54) for generating null packets according to the count from said counting means.

Regarding claim 34, Kawara discloses the claimed counting means (a counter disclosed in col. 10, lines 22-38) for counting the number of transport packets having the transport stream; detection means (a jump address JA1 disclosed in col. 13, lines 37-45 and col. 14, lines 26-34) for detecting transport packets having data serving as reproduction start positions, from among transport packets constituting said transport streams; and means (a jump address JA1 disclosed in col. 13, lines 37-45 and col. 14, lines 26-34) for making entry point maps for specifying the transport packets containing said data serving as reproduction start positions (a jump address JA1 disclosed in col. 13, lines 37-45 and col. 14, lines 26-34).

Regarding claim 35, Kawara discloses the claimed wherein said detection means detects transport packets containing I picture data as the transport packet containing data serving as reproduction start positions (a jump address JA1 disclosed in col. 13, lines 37-45 and col. 14, lines 26-34), and said means for making entry point maps writes the count from said counting means for said transport packets containing said I picture data into the entry point map (a jump address JA1 disclosed in col. 13, lines 37-45 and col. 14, lines 26-34), and also writes the I picture address into said entry point map (a jump address JA1 disclosed in col. 13, lines 37-45 and col. 14, lines 26-34). Tanaka et al also discloses the claimed PTS (page 16, paragraph #0209). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the PTS disclosed in the Tanaka et al in order to increase the quality of the reproduced data because PTS is used for synchronizing purpose.

Method claim 36 is rejected for the same reasons as discussed in corresponding apparatus claim 32.

Program recording medium claim 37 is rejected for the same reasons as discussed in the corresponding apparatus claim 32 above and the a microprocessor and the associated programs stored disclosed in col. 17, lines 34-36 of Kawara.

Data recording medium claim 38 is rejected for the same reasons as discussed in the corresponding apparatus claim 32 above and the recording medium disclosed in col. 7, lines 51-63 of Kawara.

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The cited references relate to DVD player.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai Tran whose telephone number is (703) 305-4725. The examiner can normally be reached on Mon. to Friday, 8:00 AM to 5:30 PM.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TTQ